PUBLIC AFFAIRS - American Embassy

Sylvie VACHERET Tel: 01 43 12 29 28

E Mail: vacheretsr@state.gov

U.S. ECO ONLINE - ENERGY A SELECTION OF DOCUMENTS RECENTLY PUBLISHED ON THE WEB

No 10 - May June 2009

U.S. ENERGY POLICY

The Energy Learning Curve: Coming From Different Starting Points, the Public Sees Similar Solutions Public Agenda - April 3, 2009-44 pages

http://www.publicagenda.org/files/pdf/energy_learning_curve.pdf

The study finds the American people reaching common ground on at least 10 major energy proposals, particularly on alternative energy. But the public may not yet be prepared for the tradeoffs and challenges needed to make these proposals a reality. Despite consensus on certain solutions, misconceptions and lack of knowledge hinder informed judgment.

75% Say New Energy Sources More Critical Than Fuel Efficient Cars

Rasmussen Report – May 21, 2009

http://www.rasmussenreports.com/public_content/business/auto_industry/may_2009/75_say_new_energy_sou rces more critical than fuel efficient cars

Forcing auto companies to make more fuel-efficient cars is fine, but Americans overwhelmingly believe it's more important for the country to find new energy sources.

House Passes Historic Waxman-Markey Clean Energy Bill

House – June 28, 2009

- Remarks by President Barack Obama (June 29) http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-Energy/
- Full-text of H. R. 2454

http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111 cong bills&docid=f:h2454rh.txt.pdf

John Larsen

The American Clean Energy and Security Act: Key Elements and Next Steps

World Resources Institute – May 28, 2009

http://www.wri.org/stories/2009/05/american-clean-energy-and-security-act-key-elements-and-next-steps

WRI's analysis of emissions caps, allowances, offsets, and other critical components of the American Clean Energy and Security Act.

John Larsen

A Closer Look at the American Clean Energy and Security Act

http://www.wri.org/stories/2009/07/closer-look-american-clean-energy-and-security-act

John Larsen analyses the key elements of the climate bill approved by the House of Representatives on June 26.

Cost Estimate for the American Clean Energy and Security Act of 2009

Congressional Budget Office - June 5, 2009 – 40 pages http://www.cbo.gov/ftpdocs/102xx/doc10262/hr2454.pdf

Congressional Budget Office and the Joint Committee on Taxation (JCT) estimate that over the 2010-2019 period enacting this legislation would increase federal revenues by about \$846 billion and increase direct spending by about \$821 billion. In total, those changes would reduce budget deficits (or increase future surpluses) by about \$24 billion over the 2010-2019 period.

2008 NETL Accomplishments

U.S. Department of Energy – Report - June 2, 2009 – 72 pages http://www.netl.doe.gov/publications/others/accomp rpt/accomp08.pdf

The National Energy Technology Laboratory (NETL) releases its annual accomplishments report, highlighting breakthroughs in research and technology development to address the nation's energy, economic, and environmental challenges. The accomplishments report illustrates the success of NETL and its research partners in advancing cost-effective and environmentally sound technologies to meet the nation's energy challenges today and into the future.

Technology Transfer: Clearer Priorities and Greater Use of Innovative Approaches Could Increase the Effectiveness of Technology Transfer at Department of Energy Laboratories

GAO – Report - June 16, 2009 – 54 pages http://www.gao.gov/cgi-bin/getrpt?GAO-09-548

"The Department of Energy (DOE) spends billions of dollars each year at its national laboratories on advanced science, energy, and other research. To maximize the public's investment and to foster economic growth, federal laws and policies have encouraged the transfer of federally developed technologies to private firms, universities, and others to use or commercialize... Congress requested GAO to examine (1) the nature and extent of technology transfer at DOE's laboratories; (2) the extent to which DOE can measure the effectiveness of its technology transfer efforts; and (3) factors affecting, and approaches for improving, DOE's efforts." GAO makes recommendations.

U.S. Carbon Dioxide Emissions from Energy Sources 2008 Flash Estimate

Energy Information Administration, U.S. Department of Energy - May 2009 – 17 pages http://www.eia.doe.gov/oiaf/1605/flash/pdf/flash.pdf

U.S. carbon dioxide emissions from fossil fuels decreased by 2.8 percent in 2008, from 5,967 million metric tons of carbon dioxide (MMTCO2) in 2007 to 5,802 MMTCO2 in 2008, according to preliminary estimates

released today by the Energy Information Administration (EIA). This is the largest annual decline in energy-related carbon dioxide emissions since EIA began annual reporting on greenhouse gas emissions.

Building a Sustainable Energy Future

National Science Foundation - April 10, 2009 – 61 pages http://www.nsf.gov/nsb/publications/2009/comments_se_report.pdf

This is a draft report for public review and comments. The fundamental transformation of the current extractive U.S. fossil fuel energy economy to a sustainable energy economy is a critical grand challenge facing the U.S., says the report. The report makes a number of recommendations to the U.S. Government.

Shiyong Park, Winny Chen, and Rudy deLeon

Securing America's Energy Independence through Energy Diversification - The Lessons of the Past and the Direction for the Future

Center for American Progress – Report – April 2009 - 12 pages http://www.americanprogress.org/issues/2009/04/pdf/energy_security.pdf

"In the following pages, we make a case for the unavoidable need for energy diversification and efficiency, efforts critical to our national security, economic stability, and environmental preservation. We then provide the direction our nation must take to ensure that alternative energy capabilities and energy-efficiency efforts bear fruit quickly and firmly."

CLEAN ENERGY - LOW CARBON - ECONOMY

We Must Seize the Energy Opportunity or Slip Further Behind - A Primer on Global Competition in Green Technology Investments

Center for American Progress – Report – April 2009 – 7 pages http://www.americanprogress.org/issues/2009/04/pdf/china_energy.pdf

"The United States, too, is poised to transform its economy to create millions of new jobs and help create a cleaner, safer planet by investing in a green, renewable-energy based economy. The Obama administration wants to unleash the ingenuity of our private sector to rein in pollution and put millions of Americans back to work.2 Yet China is spending twice as much as the American Recovery and Reinvestment Act spends to lay the foundations for a green energy economy, despite the U.S. economy being 1.5 times as large as China's. And across Europe and Asia, other governments have diversified their energy portfolios and encouraged entrepreneurs to start and expand clean and renewable energy companies."

The Economic Benefits of Investing in Clean Energy

Center for American Progress –June 18, 2009

http://www.americanprogress.org/issues/2009/06/clean_energy.html

A report, 50 state fact sheets, and an interactive map show how clean-energy investment can boost economic growth.

Robert Pollin, James Heintz, Heidi Garrett-Peltier

The Economic Benefits of Investing in Clean Energy - How the Economic Stimulus Program and New Legislation Can Boost U.S. Economic Growth and Employment

Center for American Progress – Report – June 18, 2009 – 69 pages http://www.americanprogress.org/issues/2009/06/pdf/peri_report.pdf

"This paper examines these broader economic considerations—jobs, incomes, and economic growth—through the lens of two government initiatives this year by the Obama administration and Congress. The first is the set of clean-energy provisions incorporated within the American Recovery and Reinvestment Act, initiated by the Obama administration and passed into law by Congress in February. The second is the proposed American Clean Energy and Security Act, co-sponsored by Rep. Henry Waxman (D-CA) and Rep. Edward Markey (D-MA), which is now before Congress. Our analysis in this paper shows that these two measures operating together can generate roughly \$150 billion per year in new clean-energy investments in the United States over the next decade."

The Clean Energy Economy: Repowering Jobs, Businesses and Investments Across America

Pew Charitable Trusts - June 2009 – 61 pages

http://www.pewcenteronthestates.org/uploadedFiles/Clean Economy Report Web.pdf

The number of jobs in America's emerging clean energy economy grew nearly two and a half times faster than overall jobs between 1998 and 2007, according to the report. Pew found that jobs in the clean energy economy grew at a national rate of 9.1 percent, while traditional jobs grew by only 3.7 percent between 1998 and 2007. Pew developed a data-driven definition of the clean energy economy and conducted hard count across all 50 states of the actual jobs, companies and venture capital investments that supply the growing market demand for environmentally friendly products and services.

Samantha Putt del Pino, Eliot Metzger, John Larsen

Sharpening the Cutting Edge: Corporate Action for a Strong, Low-Carbon Economy

World Resources Institute - April, 2009 – 26 pages http://pdf.wri.org/sharpening the cutting edge.pdf

This report assesses how companies have fared in addressing the "cutting-edge issues" identified in our 2004 report A Climate of Innovation. The experiences of our corporate partners illustrate important progress and barriers.

Kevin A. Hassett, Aparna Mathur and Gilbert E. Metcalf

The Consumer Burden of a Carbon Tax on Gasoline

American Enterprise Institute (AEI) - Working Paper - May 26, 2009 - 31 pages. http://www.aei.org/docLib/Consumer%20Burden%20AEI%20WP%20147.pdf

This paper measures the incidence of a carbon tax on gasoline using current income and two measures of lifetime income to rank households. Results suggest that carbon taxes on gasoline are more regressive when annual income is used as a measure of economic welfare than when lifetime income measures are used. In addition the authors find that the regional variation in the gasoline tax burden is likely to be modest varying by less than one-half of a percentage point with little fluctuation over the years of our analysis.

John Podesta

The Green Bank - Financing the Transition to a Low-Carbon Economy Requires Targeted Financing to Encourage Private-Sector Participation

American Center for progress – Memo - May 21, 2009 – 5 pages http://www.americanprogress.org/issues/2009/05/green_bank.html

"The creation of a new Green Bank could lead to the steady and reliable creation of clean-energy jobs and would be a crucial element of the transition to a clean-energy economy. Working in partnership with the private sector, a well constructed, public Green Bank would open credit markets and motivate businesses to invest again. It would enable clean-energy technologies—in such areas as wind, solar, geothermal, advanced

biomass, and energy efficiency—to be deployed on a large scale and become commercially viable at current electricity costs."

ENERGY EFFICIENCY

Pushing the Efficiency Envelope: R&D for High-Performance Buildings, Industries and Consumers House Committee on Science – Hearing -

http://science.house.gov/publications/hearings markups details.aspx?NewsID=2428

This committee "held a hearing on the role of the Department of Energy's (DOE) research and development programs in developing technologies, codes, and standards to enable deployment of net-zero energy, high-performance buildings and support energy efficiency in domestic industries."

Policies Needed to Improve Energy Efficiency, Revive Economy in the Southeast

U.S. World Resources Institute - May 7, 2009

http://www.wri.org/press/2009/05/policies-needed-improve-energy-efficiency-revive-economy-southeast-us

Energy efficiency policies in the Southeast U.S. can help reduce electricity use by more than 10 percent over the next six years, saving the same amount of power generated by more than 30 coal-fired power plants, according to the study.

Charlotte Jameson and Rob Sargent

Building a Better Future: Moving Toward Zero Pollution with Highly Efficient Homes and Businesses Environment America Research & Policy Center - April 2009 - 30 pages. http://www.environmentamerica.org/uploads/qk/zy/qkzycNV75kmR8g8HlAR7rw/AME_BBA_web.pdf

40 percent of America's energy -- ten percent of all the energy used in the world -- goes towards powering buildings. Much of this energy is simply wasted through poor insulation, leaky windows, inefficient lighting, heating or cooling systems, and poor construction techniques. Building a more energy-efficient America is one of the most effective and least expensive ways to increase energy security and reduce global warming pollution, while creating jobs and improving economic competitiveness.

Green Jobs/Green Homes NY - Expanding Home Energy Efficiency and Creating Good Jobs in a Clean-Energy Economy

American Center for Progress – Report – May 15, 2009

http://www.americanprogress.org/issues/2009/05/greenjobs greenhomes.html

"Over the next two years, federal stimulus funding will pour into state energy-efficiency programs and prompt a massive ramp-up of existing capacity. These investments offer a historic opportunity to develop green policy infrastructure at the state and local levels that can be sustained after the stimulus dollars are spent. Those states that have already established energy-efficiency infrastructure and possess a coherent plan to implement expansion will be best positioned to lead this national moment. Green Jobs/Green Homes NY is such a plan: a policy roadmap for New York State to achieve mass-scale energy-efficiency improvements—or retrofits—of 1 million housing units over the next five years."

Review of Site (Point-Of-Use) and Full-Fuel-Cycle Measurement Approaches to DOE/EERE Building Appliance Energy-Efficiency Standards

National Research Council – Report - May 27, 2009 http://www.nap.edu/catalog.php?record_id=12670#toc The report recommends that the U.S. Department of Energy should consider gradually changing its system of setting appliance energy-efficiency standards to a full-fuel-cycle measurement, which takes into account both the energy used to operate an appliance. It also recommends to include upstream energy costs, energy consumed in producing and distributing fuels from coal, oil, and natural gas, and energy lost in generating and delivering electric power. This change would offer consumers more complete information on household energy consumption and its environmental impacts, says the congressionally mandated report.

PC Energy Report 2009: United States, United Kingdom, Germany

1E and Alliance to Save Energy - March 26, 2009 http://www.1e.com/Energycampaign/Index.aspx

According to the study, nearly half of U.S. workers who use a PC at their job do not typically shut down at night1. The study, examines workplace PC power consumption in the U.S., U.K. and Germany, found that U.S. organizations waste \$2.8 billion a year to power 108 million unused machines. In 2009, these unused PCs are expected to emit approximately 20 million tons of carbon dioxide emissions, roughly the equivalent impact of 4 million cars.

OIL

Oil and the Economy: The Impact of Rising Global Demand on the U.S. Recovery

U.S. Congress Joint Economic Committee - May 20, 2009

 $\underline{http://jec.senate.gov/index.cfm?FuseAction=Hearings.HearingsCalendar\&ContentRecord_id=5e129c13-5056-8059-763d-4ed43bdca2f8\&Region_id=\&Issue_id=$

"While the global economic downturn has reduced demand for oil in both developed and developing nations, signs of economic recovery have already begun to nudge oil prices higher. The hearing will examine the impact of last year's oil price shock on the U.S. economy, near term expectations for crude oil prices, and developments in the global supply of crude oil. The hearing will also explore policy options for minimizing the impact of higher oil prices on the economic recovery in the U.S."

Strategic Petroleum Reserve

 $U.S.\ Government\ Accountability\ Office\ -\ May\ 12,\ 2009-16\ pages\ \underline{http://www.gao.gov/new.items/d09695t.pdf}$

The possibility of storing refined petroleum products as part of the Strategic Petroleum Reserve (SPR) has been contemplated since the SPR was created in 1975. The SPR, which currently holds about 700 million barrels of crude oil, was created to help insulate the U.S. economy from oil supply disruptions. However, the SPR does not contain refined products such as gasoline, diesel fuel, or jet fuel. The Energy Policy Act of 2005 directed the Department of Energy (DOE) to increase the SPR's capacity from 727 million barrels to 1 billion barrels, which it plans to do by 2018.

Gulf of Mexico and Gas Production Forecast: 2007-2016

Minerals Management Service, U.S. Department of the Interior - May 5, 2009 - 25 pages http://www.gomr.mms.gov/PDFs/2007/2007-020.pdf

In the forecast report, Gulf of Mexico (GOM) oil production is forecasted to increase substantially over the next several years, possibly reaching 1.8 million barrels of oil per day. GOM gas production is forecasted to continue its decline over the next four years due to aging projects in shallow water. Future increases depend on the successful development of undiscovered resources in the Gulf.

Keith Crane et al.

Imported Oil and U.S. National Security

RAND Corporation - May 11, 2009 - 127 pages

http://www.rand.org/pubs/monographs/2009/RAND_MG838.pdf

While on a net basis the United States imports nearly 60 percent of the oil it consumes, this reliance on imported oil is not by itself a major national security threat, according to the study. The study finds that the economic costs of a major disruption in global oil supplies pose the greatest risk to the United States. The study evaluates commonly suggested links between oil imports and U.S. national security, and assesses the economic, political and military costs and benefits of potential policies to address threats to U.S. national security associated with imported oil.

Laurel Graefe

The Peak Oil Debate

Federal Reserve Bank of Atlanta – Economic Review - No. 2, 2009 – 16 pages http://www.frbatlanta.org/filelegacydocs/er0902_graefe.pdf

"Has the world's oil output peaked, or will it peak soon? The author helps clarify this heated debate by providing definitions of frequently used (and misused) terms and discussing how technology, government policies, and prices influence oil production."

COAL

Nicholas Ducote and H. Sterling Burnett

Turning Coal into Liquid Fuel

National Center for Policy Analysis - Brief Analysis No. 656 - May 1, 2009 – 2 pages http://www.ncpa.org/pdfs/ba656.pdf

"First developed by Germany during World War II, the Fischer-Tropsch (FT) process offers America a chance to utilize its vast domestic coal supply, increase refining capacity, and produce a cost-efficient and clean fuel."

Meeting Projected Coal Production Demands in the USA: Upstream Issues, Challenges, and Strategies Virginia Center for Coal and Energy Research, Virginia Polytechnic Institute and State University - May 12, 2009 – 20 pages

http://www.energycommission.org/ht/a/GetDocumentAction/i/10370

The study seeks to investigate different aspects of the coal supply chain and to highlight critical "upstream" fuel cycle issues that need to be addressed to ensure that the domestic coal industry can continue meeting the nation's energy demands while delivering the social benefits and environmental performance demanded by the public. It reviews all coal-related upstream issues, identifying problems and strengths, and recommending areas of improvement.

NUCLEAR

Kristine L. Svinick

The Nuclear Renaissance in America

U.S. Nuclear Regulatory Commission – Remarks to IFRI – May 4, 2009 http://www.nrc.gov/reading-rm/doc-collections/commission/speeches/2009/s-09-011.html

"In the United States – and globally -- there has been much discussion in recent years of a so-called "Nuclear Renaissance." Generally speaking, this phrase describes a renewed interest by government and industry in

nuclear power as a solution to a number of the world's most daunting problems, including energy shortages and clean air goals. If it comes to fruition in the United States, such a renaissance could result in the construction of the first new nuclear power plants in years, and is already leading to the creation of new, more-standardized, and potentially safer nuclear reactor designs."

Advancing Technology for Nuclear Fuel Recycling: What Should Our Research, Development and Demonstration Strategy Be?

House Committee on Science and Technology – Hearing – June 17, 2009 http://science.house.gov/publications/hearings_markups_details.aspx?NewsID=2491

"The House Committee on Science and Technology held a hearing to explore the status of nuclear waste recycling and to discuss the ongoing and needed research, development and demonstration activities in the federal government, private sector and around the globe. Members and Witnesses also discussed the safety, environmental, security and economic issues related to the adoption of a nuclear waste reprocessing strategy."

RENEWABLES

President Obama Announces Over \$467 Million in Recovery Act Funding for Geothermal and Solar Energy Projects

U.S. Department of Energy - May 27, 2009 http://www.energy.gov/news2009/print2009/7427.htm

"We have a choice. We can remain the world's leading importer of oil, or we can become the world's leading exporter of clean energy," said President Obama. "We can hand over the jobs of the future to our competitors, or we can confront what they have already recognized as the great opportunity of our time: the nation that leads the world in creating new sources of clean energy will be the nation that leads the 21st century global economy. That's the nation I want America to be."

Secretary Chu Announces \$93 Million from Recovery Act to Support Wind Energy Projects, 29/04/2009 Department of Energy – News Release - April 29, 2009 http://www.energy.gov/news2009/7358.htm

In an ongoing effort to expand domestic renewable energy, U.S. Secretary of Energy Steven Chu today announced plans to provide \$93 million from the American Recovery and Reinvestment Act to support further development of wind energy in the United States...The funding will leverage the Department of Energy's national laboratories, universities, and the private sector to help improve reliability and overcome key technical challenges for the wind industry. These projects will create green jobs, promote economic recovery, and provide the investments needed to increase renewable energy generation.

EPA Proposes New Regulations for the National Renewable Fuel Standard Program for 2010 and Beyond

U.S. Environmental Protection Agency. May 5, 2009 – 9 pages http://www.epa.gov/otaq/renewablefuels/420f09023.pdf

The U.S. Environmental Protection Agency is proposing its strategy for increasing the supply of renewable fuels, poised to reach 36 billion gallons by 2022, as mandated by the Energy Independence and Security Act of 2007. Increasing renewable fuels will reduce dependence of foreign oil by more than 297 million barrels a year and reduce greenhouse gas emissions by an average of 160 million tons a year when fully phased in by 2022. EISA will establish four categories of renewable fuels.

Is It Time To Invest In United States Solar Manufacturing?

Deloitte LLP - Web posted April 20, 2009 – 4 pages

http://www.deloitte.com/dtt/cda/doc/content/us consulting debates USSolarEnergy 030309.pdf

The U.S. has the potential to be the next big emerging market for solar. As policymakers work to balance the challenges of issues such as energy independence, climate change and economic growth, many see the solar industry sitting squarely in the sweet spot, according to the report. Not only does the U.S. represent a big potential market for solar power, it also has the potential to become a world leader in solar manufacturing.

Economics of Ethanol: Costs, Benefits, and Future Prospects of Biofuels

Federal Reserve Bank of St. Louis – Regional Economic Development - April 2009 – 119 pages https://research.stlouisfed.org/publications/red/2009/01/RED 2009 1.pdf

Proceedings of a conference co-hosted by the Federal Reserve Bank of St. Louis and the Weidenbaum Center on the Economy, Government, and Public Policy and the International Center for Advanced Renewable Energy & Sustainability, Washington University in St. Louis, November 14, 2008

Biofuels in the United States

Office of Agricultural Affairs, U.S. Embassy, Paris - Newsletter – May 2009 http://www.usda-france.fr/media/may-2009.pdf

Economic and technical information on the development of biofuels in the United States

ELECTRICITY

Patrick Sullivan et al.

Comparative Analysis of Three Proposed Federal Renewable Electricity Standards

National Renewable Energy Laboratory - May 19, 2009 – 30 pages http://www.nrel.gov/docs/fy09osti/45877.pdf

The study compares three proposed national renewable electricity standards, also known as renewable portfolio standards. To assess the potential impacts of the three proposed standards on the U.S. electricity sector, a team of senior NREL energy analysts used the Laboratory's Regional Energy Deployment System, a detailed least-cost optimization model capable of simulating the special attributes of variable sources like wind and solar power.

Mark Gielecki and Shirley Fleming

State Renewable Electricity 2007

Energy Information Administration - June 2009 – 159 pages

http://www.eia.doe.gov/cneaf/solar.renewables/page/state profiles/srp2007.pdf

The report shows the capacity and generation of electricity from renewable sources in the United States. The renewable capacity increased by 6,020 megawatts in 2007. This represents an increase of 5.9 percent over the 2006 capacity level. Both the capacity and the percentage increase are about double what they were in 2006 over 2005. Renewable generation decreased by 8.6 percent in 2007 compared to 2006. This was primarily due to a drop in conventional hydro generation, which decreased by over 14 percent. Non-hydro renewable generation increased by 8,711 thousand megawatthours, or, 9 percent, reaching 105,237 megawatthours in 2007.

The Future of the Grid: Proposals for Reforming National Transmission Policy

House - Subcommittee on Energy and Environment - Hearing - June 12, 2009 <a href="http://energycommerce.house.gov/index.php?option=com_content&view=article&id=1664:energy-and-commerce-subcommittee-hearing-on-the-future-of-the-grid-proposals-for-reforming-national-transmission-policy&catid=130:subcommittee-on-energy-and-the-environment&Itemid=7

This hearing addressed proposals for new legislation on transmission planning, cost allocation, and siting authority.

Smart Grid Interoperability Standards Project

National Institute of Standards and Technology – 2009 http://www.nist.gov/smartgrid/

"Under the Energy Independence and Security Act (EISA) of 2007, the National Institute of Standards and Technology (NIST) has "primary responsibility to coordinate development of a framework that includes protocols and model standards for information management to achieve interoperability of smart grid devices and systems..." As specified in the American Recovery and Reinvestment Act (ARRA), NIST will receive \$10 million through the Department of Energy (DOE) to carry out responsibilities assigned under EISA. In addition, NIST is allocating \$5 million in ARRA funding for this purpose. The funding supports collaborative efforts to develop a comprehensive framework for a nationwide, interoperable Smart Grid for the U.S. electric power system."

TRANSPORTATION

Federal Energy and Fleet Management

U.S. Government Accountability Office - June 2009 – 53 pages http://www.gao.gov/new.items/d09493.pdf

The U.S. transportation sector relies almost exclusively on oil; as a result, it causes about a third of the nation's greenhouse gas emissions. Advanced technology vehicles powered by alternative fuels, such as electricity and ethanol, are one way to reduce oil consumption. The federal government set a goal for federal agencies to use plug-in hybrid electric vehicles, vehicles that run on both gasoline and batteries charged by connecting a plug into an electric power source, as they become available at a reasonable cost.

INTERNATIONAL ISSUES

International Energy Outlook 2009

Energy Information Administration - May 2009 – 284 pages http://www.eia.doe.gov/oiaf/ieo/pdf/0484(2009).pdf

World marketed energy consumption is projected to grow by 44 percent between 2006 and 2030, driven by strong long-term economic growth in the developing nations of the world, according to the reference case projection. The current global economic downturn will dampen world energy demand in the near term, as manufacturing and consumer demand for goods and services slows. However, with economic recovery anticipated to begin within the next 12 to 24 months, most nations are expected to see energy consumption growth at rates anticipated prior to the recession.

Julian Wong, Andrew Light

China Begins Its Transition to a Clean-Energy Economy

American Center for Progress - Memo - June 4, 2009 - 8 pages

http://www.americanprogress.org/issues/2009/06/china_energy_numbers.html

"The bottom line: China is not there yet, but it is beginning to transition to a clean-energy economy through a wide range of actions. The United States should recognize China's efforts and encourage China to expand upon them. We have sketched this claim before, but let's run though the numbers in more detail."

Country Analysis Briefs: Kuwait

Energy Information Administration - April 2009 - 8 pages http://www.eia.doe.gov/emeu/cabs/Kuwait/pdf.pdf

Despite its relatively small size, Kuwait is one of the world's top exporters of oil, with over 2.6 million barrels per day exported in 2007. Kuwait's economy is heavily dependent on oil export revenues which account for roughly 90 percent of total export earnings. Kuwait channels around 10 percent of its oil revenues into the "Future Generations Fund" for the day when oil income runs out. The bulk of this reserve is generally invested in the United States, Germany, the United Kingdom, France, Japan, and Southeast Asia.

Country Analysis Briefs: Ecuador

 $Energy\ Information\ Administration\ -\ April\ 2009-6\ pages \\ \underline{http://www.eia.doe.gov/emeu/cabs/Ecuador/pdf.pdf}$

Ecuador is one of Latin America's largest oil exporters, with net oil exports estimated at 327,000 barrels per day (bbl/d) in 2008. The oil sector dominates the Ecuadorian economy, accounting for almost half of total export earnings and one-third of all tax revenues.

Country Analysis Briefs: Algeria

Energy Information Administration - May 2009 - 8 pages http://www.eia.doe.gov/emeu/cabs/Algeria/pdf.pdf

Algeria is an important exporter of oil and natural gas and is a member of the Organization of the Petroleum Exporting Countries (OPEC). In 2008, Algeria produced 1.42 million bbl/d of crude oil. Algeria was the fourth largest crude oil producer in Africa after Nigeria (1.94), Angola (1.89), and Libya (1.71) and the largest total oil liquids producer on the continent.

Country Analysis Briefs: Nigeria

Energy Information Administration - May 2009 - 9 pages http://www.eia.doe.gov/emeu/cabs/Nigeria/pdf.pdf

The Nigerian economy is heavily dependent on the oil sector which accounts for over 95 percent of export earnings and about 85 percent of government revenues. The oil industry is primarily located in the Niger Delta where it has been a source of conflict. The industry has been blamed for pollution that has damaged air, soil and water leading to losses in arable land and decreasing fish stocks. Local groups seeking a share of the oil wealth often attack the oil infrastructure and staff, forcing companies to declare force majeure on oil shipments.

OPEC Oil Export Revenues

Energy Information Administration - June 2009 http://www.eia.doe.gov/emeu/cabs/OPEC Revenues/pdf.pdf

Based on projections from the EIA June 2009 Short-Term Energy Outlook (STEO), members of the Organization of the Petroleum Exporting Countries (OPEC) could earn \$530 billion of net oil export revenues in 2009 and \$620 billion in 2010. Last year, OPEC earned \$968 billion in net oil export revenues, a 42 percent increase from 2007. Saudi Arabia earned the largest share of these earnings, \$285 billion, representing 29

percent of total OPEC revenues. On a per-capita basis, OPEC net oil export earning reached \$2,680 in 2008, a 40 percent increase from 2007.